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corresponding to said digitally-encoded electrical signal, the information transfer time from receipt of said input digitally-encoded optical signal to production of said delayed digitally-encoded optical signal being less than or equal to the information transfer time of a section of optical fibre to be emulated.

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15. (Amended) The method of claim 12, wherein said step of receiving and producing said digitally-encoded electrical signal includes converting said electrical signal from serial-bit form to parallel-bit form, propagating said electrical signal through a transmission line of predetermined length at a rate substantially equal to the information transfer rate of said section of optical fibre, and then converting said electrical signal from parallel-bit form to serial-bit form.
16. (Amended) The method of claim 15, wherein said step of receiving and producing said digitally-encoded electrical signal further includes converting said electrical signal in parallel form from a transmission code of a first length to a data code of a second, shorter length prior to propagation, and, after propagation, converting said data code of said second length to said transmission code of said first length prior to converting said electrical signal from parallel-bit form to serial-bit form.
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18. (Amended) The method of claim 12, wherein said step of receiving and producing said digitally-encoded electrical signal further includes converting said digitally encoded electrical signal from a transmission code of a first length to a data code of a second, shorter length prior to propagation, and, after propagation, converting said data code of said second length to said transmission code of said first length prior to producing a delayed digitally-encoded optical signal corresponding to said digitally-encoded electrical signal.